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Steven L. Grobman

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SCHWEGMAN, LUNDBERG & WOESSNER, P.A.

P.O. BOX 2938

MINNEAPOLIS, MN 55402

EXAMINER

SETO, JEFFREY K

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/750,170	Applicant(s) GROBMAN ET AL.	
	Examiner Jeffrey Seto	Art Unit 2458	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☒ Claim(s) 6,8,19,21,26,35,37 and 48 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-54 are pending.

Claim Objections

2. Claims 6, 8, 19, 21, 26, 35, 37 & 48 are objected to because of the following informalities:
 - a. Regarding claim 6, “success of failure” in line 9, should be changed to “success or failure”.
 - b. Regarding claim 8, the claim recites the exact same limitations as those in claim 7.
 - c. Regarding claim 19, “the first caller is remote application user” in line 1, should be changed to “the first caller is a remote application user”.
 - d. Regarding claim 21, “DSML” in line 2, and “LDAP” in line 5, should each be spelled out, so that it is clear what each acronym stands for.
 - e. Regarding claim 26, “success of failure” in line 14, should be changed to “success or failure”.
 - f. Regarding claim 35, “success of failure” in line 10, should be changed to “success or failure”.
 - g. Regarding claim 37, the claim recites the exact same limitations as those in claim 36.
 - h. Regarding claim 48, “the first caller is remote application user” in lines 1-2, should be changed to “the first caller is a remote application user”.

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Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 10 & 39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. Regarding claim 10, "the set" in line 2, lacks antecedent basis.
- b. Regarding claim 39, "the set" in line 2, lacks antecedent basis.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 30-54 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

5. Regarding claims 30-54, each claim is directed toward a "machine readable medium". Page 6, lines 10-15 of the specification state that the machine readable medium can be electrical, optical and acoustical signals, including carrier waves and infrared signals, none of which are statutory subject matter. The specification also

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mentions the medium can be a ROM, RAM and magnetic disk, however, the claims must be read as broadly as possible, in light of the specification. Thus, the above claims currently include non-statutory subject matter, and are not patentable. Applicant can overcome this rejection by removing the offending language, i.e., any mention of waves and signals as the medium, from the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 5, 15-20, 30, 31, 34, 40 & 44-49 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,103,589 issued to Kepler, et al. (Kepler), in view of U.S. Patent No. 6,879,564 issued to Parham, et al. (Parham).

7. Regarding claim 1, Kepler teaches a method comprising: receiving a first request to perform a write operation on one of a plurality of data stores, wherein the one of the plurality of data stores is undetermined (See column 3, lines 32-34, and col. 15, lines 64-65; wherein the request can be a write), and wherein the first request includes an identifier (See col. 6, lines 21-24, and col. 14, lines 16-18; wherein one of the fields, including the "route by" field, can include the identifier); creating a second request, wherein the second request requests performance of the write operation (See col. 3, lines 34-36; wherein the modified search request is the second request); determining

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the one of the plurality of data stores to which the second request will be transmitted (See col. 3, lines 36-37; wherein the examination of the search-routing database determines “the one”); and transmitting the second request to the one of the plurality of data stores (See col. 3, lines 40-42; wherein the request is sent to the database identified in the search-routing database). Kepler does not disclose that the data stores are multi-master data stores, the identifier includes an optimization technique, nor that the determining includes using the optimization technique associated with an optimization technique identifier. However, Parham teaches the data stores are multi-master data stores (See col. 1, lines 45-48), an optimization technique (See col. 4, lines 40-45; wherein the shortest path algorithm is the optimization technique), and that the determining includes using the optimization technique (See col. 4, lines 54-57). Using the features of Parham in the system of Kepler would have expanded the capabilities of Kepler to included distributed databases, and would have made the system more cost effective and efficient by allowing the system to use the shortest and cheapest paths to desired databases. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Parham with Kepler.

8. Regarding claim 2, Kepler teaches the plurality of data stores are directory servers (See col. 5, lines 4-6, and col. 7, lines 3-6).

9. Regarding claim 5, Parham teaches the first request includes additional optimization technique identifiers (See col. 7, lines 43-46; wherein a technique other than “shortest path” is disclosed for replication purposes). Using the features of Parham in the system of Kepler would have increased the abilities of Kepler to included multi-

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master databases, and would have made sure that the most cost effective paths, between write-able databases, were used during the replication process. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Parham with Kepler.

10. Regarding claim 11, Kepler teaches a method comprising: creating a first transaction request, wherein the first transaction request includes an identifier for determining to which one of a plurality of servers a second transaction request is transmitted (See col. 3, lines 32-34, and col. 14, lines 16-18; wherein the route-by field is the identifier); and transmitting the first transaction request to an intermediate server (See col. 3, lines 34-37; wherein the search-routing database is the intermediate server). Kepler does not teach an optimization technique, nor that the servers are multi-master servers. However, Parham teaches an optimization technique (See col. 4, lines 40-45; wherein the shortest path algorithm is the optimization technique), and that the servers are multi-master servers (See col. 1, lines 45-48). Using the features of Parham in the system of Kepler would have expanded the capabilities of Kepler to include distributed databases, and would have made the system more cost effective and efficient by allowing the system to use the shortest and cheapest paths to desired databases. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Parham with Kepler.

11. Regarding claim 15, Kepler teaches a method comprising: selecting a first one of a set of geographically distributed data stores based on proximity of the first one to a first principal, a first object, or a first caller (See col. 9, lines 52-57; wherein the user is

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the first principal); and transmitting a first write request to the first one of the set of geographically distributed data stores (See col. 15, lines 61-65; wherein an insertion operation is a write operation). Kepler does not disclose that the data stores are multi-master data stores. However, Parham teaches multi-master data stores (See col. 1, lines 45-48). Using the features of Parham in the system of Kepler would have expanded the capabilities of Kepler to included distributed databases, thereby increasing the customer base of Kepler. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Parham with Kepler.

12. Regarding claim 16, Kepler further teaches the set includes a directory server (See col. 5, lines 4-6, and col. 7, lines 3-6).

13. Regarding claim 17, Kepler further teaches the first principal is a computer user (See col. 9, lines 55-57).

14. Regarding claim 18, Parham teaches the first object is a computer (See col. 4, lines 54-57). Using the features of Parham in the system of Kepler would have allowed the system to compute the closest database to the user, based on the computer and not the user. Thereby allowing any user to enjoy the capabilities of the system. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Parham with Kepler.

15. Regarding claim 19, Kepler further teaches the first caller is a remote application user (See col. 9, lines 55-57).

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16. Regarding claim 20, Parham teaches selecting a second one of the set based on proximity of the second one to a second principal, a second object, or a second caller (See col. 4, lines 59-61; wherein next closest server is “the second one”); and transmitting a second write request to the second one of the set (See col. 6, lines 61-67; wherein replication of data includes write requests). Using the features of Parham in the system of Kepler would have allowed the system to have a second choice, or backup server, in case there were any problems with the first choice of servers. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Parham with Kepler.

17. Regarding claim 30, this claim recites a machine-readable medium with instructions for carrying out the method of claim 1, and is rejected for the same reasons.

18. Regarding claim 31, this claim recites a machine-readable medium with instructions for carrying out the method of claim 2, and is rejected for the same reasons.

19. Regarding claim 34, this claim recites a machine-readable medium with instructions for carrying out the method of claim 5, and is rejected for the same reasons.

20. Regarding claim 40, this claim recites a machine-readable medium with instructions for carrying out the method of claim 11, and is rejected for the same reasons.

21. Regarding claim 44, this claim recites a machine-readable medium with instructions for carrying out the method of claim 15, and is rejected for the same reasons.

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22. Regarding claim 45, this claim recites a machine-readable medium with instructions for carrying out the method of claim 16, and is rejected for the same reasons.

23. Regarding claim 46, this claim recites a machine-readable medium with instructions for carrying out the method of claim 17, and is rejected for the same reasons.

24. Regarding claim 47, this claim recites a machine-readable medium with instructions for carrying out the method of claim 18, and is rejected for the same reasons.

25. Regarding claim 48, this claim recites a machine-readable medium with instructions for carrying out the method of claim 19, and is rejected for the same reasons.

26. Regarding claim 49, this claim recites a machine-readable medium with instructions for carrying out the method of claim 20, and is rejected for the same reasons.

27. Claims 3, 6, 9, 10, 12, 13, 26, 29, 32, 35, 38, 39, 41 & 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kepler, in view of Parham, as applied to claims 1, 11, 30 & 40 above, and further in view of U.S. Patent Application Publication No. 2004/0083479 to Bondarenko, et al. (Bondarenko).

28. Regarding claim 3, Kepler in view of Parham teach the invention as described in claim 1. Kepler and Parham do not teach the first request includes code of the

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Directory Services Markup Language. However, Bondarenko teaches the use of Directory Services Markup Language (DSML) (See paragraph 87, lines 8-13). Using the features of Bondarenko in the system of Kepler in view of Parham would have allowed the system to take advantage of the capabilities offered by DSML, including expressing directory queries, updates and results in an XML application. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Bondarenko with Parham and Kepler.

29. Regarding claim 6, Kepler teaches a method comprising: receiving in a directory server a request to modify a directory, wherein the request is received from a server (See col. 3, lines 32-36), and wherein the server selected the directory server based on a technique associated with a technique identifier included in a request (See col. 14, lines 16-18; wherein the route-by field is the technique identifier); modifying the directory (See col. 15, lines 61-64; wherein delete/insert is the modification); and transmitting a response to the server, wherein the response indicates success or failure of the modification (See col. 3, lines 38-40; wherein the responsive data indicates success or failure). Further, regarding claim 6, Parham teaches an optimization technique that is used to select a server (See col. 4, lines 40-45; wherein the shortest path algorithm is the optimization technique). Kepler, in view of Parham, do not teach the server is a Directory Services Markup Language (DSML) server. However, Bondarenko teaches the use of a DSML server (See par. 87, lines 8-13). Using the features of Bondarenko in the system of Kepler in view of Parham would have allowed the system to take advantage of the capabilities offered by DSML, including expressing directory queries,

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updates and results in an XML application. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Bondarenko with Parham and Kepler.

30. Regarding claim 9, Kepler in view of Parham and Bondarenko teach the invention as described in claim 6. Bondarenko further teaches the request is formatted according to the Directory Services Markup Language (See col. 87, lines 8-13).

31. Regarding claim 10, Kepler, in view of Parham and Bondarenko, teach the invention as described in claim 6. Kepler further teaches the optimization technique is selected from a set consisting of: closest to caller, closest to principal or object, and closest to dynamic object X (See col. 9, lines 52-57; wherein the user is the caller/principal).

32. Regarding claim 12, Kepler, in view of Parham, teach the invention as described in claim 11. Kepler and Parham do not teach the first transaction request includes Directory Services Markup Language code. However, Bondarenko teaches the first transaction request includes Directory Services Markup Language code (See par. 87, lines 8-13). Using the features of Bondarenko in the system of Kepler in view of Parham would have allowed the system to take advantage of the capabilities offered by DSML, including expressing directory queries, updates and results in an XML application. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Bondarenko with Parham and Kepler.

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33. Regarding claim 13, Kepler, in view of Parham, teach the invention as described in claim 11. Kepler and Parham do not teach the first transaction request includes a Simple Object Access Protocol (SOAP) comment, wherein the SOAP comment includes the optimization technique identifier. However, Bondarenko teaches the first transaction request includes a Simple Object Access Protocol (SOAP) comment, and wherein the SOAP comment includes the optimization technique identifier (See par. 56, lines 1-6, and par. 57, lines 1-7; wherein the entire request is transported using SOAP). Using the features of Bondarenko in the system of Kepler in view of Parham would have allowed the system to take advantage of the capabilities offered by SOAP, including transporting requests in a standard and accepted web-based protocol. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Bondarenko with Parham and Kepler.

34. Regarding claim 26, Kepler teaches a system comprising: a processor (40); a dynamic random access memory unit (42); a machine readable medium including instructions for performing the following operations, receiving in a directory server a request to modify a directory, wherein the request is received from a server (See col. 2, lines 32-36), and wherein the server selected the directory server based on an technique associated with a technique identifier included in a request (See col. 14, lines 16-18); modifying the directory (See col. 15, lines 61-64); and transmitting a response to the server, wherein the response indicates success of failure of the modification (See col. 3, lines 38-40). Further, regarding claim 26, Parham teaches an optimization technique that is used to select a server (See col. 4, lines 40-45). Kepler and Parham

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do not teach the server is a Directory Services Markup Language (DSML) server. However, Bondarenko teaches the use of a Directory Services Markup Language (DSML) server (See par. 87, lines 8-13). Using the features of Bondarenko in the system of Kepler in view of Parham would have allowed the system to take advantage of the capabilities offered by DSML, including expressing directory queries, updates and results in an XML application. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Bondarenko with Parham and Kepler.

35. Regarding claim 29, Kepler in view of Parhma and Bondarenko teach the invention as described in claim 26. Kepler further teaches the optimization technique is selected from a set consisting of: closest to caller, closest to principal or object, and closest to dynamic object X (See col. 9, lines 52-57).

36. Regarding claim 32, this claim recites a machine-readable medium with instructions for carrying out the method of claim 3, and is rejected for the same reasons.

37. Regarding claim 35, this claim recites a machine-readable medium with instructions for carrying out the method of claim 6, and is rejected for the same reasons.

38. Regarding claim 38, this claim recites a machine-readable medium with instructions for carrying out the method of claim 9, and is rejected for the same reasons.

39. Regarding claim 39, this claim recites a machine-readable medium with instructions for carrying out the method of claim 10, and is rejected for the same reasons.

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40. Regarding claim 41, this claim recites a machine-readable medium with instructions for carrying out the method of claim 12, and is rejected for the same reasons.

41. Regarding claim 42, this claim recites a machine-readable medium with instructions for carrying out the method of claim 13, and is rejected for the same reasons.

42. Claims 4, 14, 33 & 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kepler, in view of Parham, as applied to claims 1, 11, 30 & 40 above, and further in view of U.S. Patent No. 7,376,827 issued to Jiao.

43. Regarding claim 4, Kepler, in view of Parham, teach the invention as described in claim 1. Kepler and Parham do not teach the second request is formatted according to the Lightweight Directory Access Protocol (LDAP). However, Jiao teaches formatting requests according to the Lightweight Directory Access Protocol (See col. 6, lines 41-43). Using the features of Jiao in the system of Kepler, in view of Parham, would have allowed the system to take advantage of mechanisms offered by LDAP, including the ability to determine the structure of information in a directory, and the ability to receive paged information delivery. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Jiao with the system of Kepler and Parham.

44. Regarding claim 14, Kepler, in view of Parham, teach the invention as described in claim 11. Kepler and Parham do not teach the second transaction request is

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formatted according to the Lightweight Directory Access Protocol (LDAP). However, Jiao teaches formatting requests according to the Lightweight Directory Access Protocol (See col. 6, lines 41-43). Using the features of Jiao in the system of Kepler, in view of Parham, would have allowed the system to take advantage of mechanisms offered by LDAP, including the ability to determine the structure of information in a directory, and the ability to receive paged information delivery. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Jiao with the system of Kepler and Parham.

45. Regarding claim 33, this claim recites a machine-readable medium with instructions for carrying out the method of claim 4, and is rejected for the same reasons.

46. Regarding claim 43, this claim recites a machine-readable medium with instructions for carrying out the method of claim 14, and is rejected for the same reasons.

47. Claims 7, 8, 21-24, 27, 28, 36, 37 & 50-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kepler, in view of Parham and Bondarenko, and further in view of Jiao.

48. Regarding claim 7, Kepler, in view of Parham and Bondarenko, teach the invention as described in claim 6. Kepler, in view of Parham and Bondarenko, do not teach the request is formatted according to the Lightweight Directory Access Protocol (LDAP). However, Jiao teaches formatting requests according to the Lightweight Directory Access Protocol (See col. 6, lines 41-43). Using the features of Jiao in the

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system of Kepler, in view of Parham and Bondarenko, would have allowed the system to take advantage of mechanisms offered by LDAP, including the ability to determine the structure of information in a directory, and the ability to receive paged information delivery. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Jiao with the system of Kepler and Parham.

49. Regarding claim 8, this claim is an exact duplicate of claim 7, and is rejected for the same reasons.

50. Regarding claim 21, Kepler teaches a method comprising: receiving a request, wherein the request includes, a technique identifier (See col. 3, lines 32-34, and col. 14, lines 16-18); and a first set of one or more directory server write requests (See col. 15, lines 64-65); creating a second set of one or more requests, wherein each of the requests includes at least one of the directory server write requests (See col. 3, lines 34-36); determining to which of a third set of geographically distributed directory servers the requests will be transmitted, wherein the determining includes using a technique associated with the technique identifier (See col. 3, lines 36-37, and col. 14, lines 16-18), and wherein the technique selects those of the third set of servers based on a network location of one or more principals and one or more objects (See col. 9, lines 52-59); and transmitting ones of the second set of requests to ones of the third set of servers (See col. 3, lines 40-42). Kepler does not teach that the request is a DSML request, an optimization technique, the one or more requests are LDAP requests, nor that the servers are multi-master servers. However: Parham teaches an optimization

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technique that is used to select a server (See col. 4, lines 40-45), and the use of multi-master servers (See col. 1, lines 45-48); Bondarenko teaches the use of DSML servers (See par. 87, lines 8-13); and, Jiao teaches the use of one or more LDAP requests (See col. 6, lines 41-43). Using the features of Parham in the system of Kepler would have expanded the capabilities of Kepler to included distributed databases, and would have made the system more cost effective and efficient by allowing the system to use the shortest and cheapest paths to desired databases. Using the features of Bondarenko in the system of Kepler would have allowed the system to take advantage of the capabilities offered by DSML, including expressing directory queries, updates and results in an XML application. Using the features of Jiao in the system of Kepler would have allowed the system to take advantage of mechanisms offered by LDAP, including the ability to determine the structure of information in a directory, and the ability to receive paged information delivery. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Parham, Bondarenko and Jiao in the system of Kepler.

51. Regarding claim 22, Kepler, in view of Parham, Bondarenko and Jiao, teach the invention as described in claim 21. Parham further teaches the use of a secondary optimization technique (See col. 7, lines 43-46; wherein a technique other than shortest path is used).

52. Regarding claim 23, Kepler, in view of Parham, Bondarenko and Jiao, teach the invention as described in claim 21. Bondarenko further teaches the optimization

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technique identifier is located in a SOAP comment (See par. 56, lines 1-6, and par. 57, lines 1-7; wherein the entire request is transported using SOAP).

53. Regarding claim 24, Kepler, in view of Parham, Bondarenko and Jiao, teach the invention as described in claim 21. Jiao further teaches the network location of the one or more principals and the one or more objects is determined using one or more of a set of network location services (See col. 8, lines 7-9; wherein Domain Name System (DNS) is the location service).

54. Regarding claim 27, Kepler, in view of Parham and Bondarenko, teach the invention as described in claim 26. Kepler, in view of Parham and Bondarenko, do not teach the request is formatted according to the Lightweight Directory Access Protocol (LDAP). However, Jiao teaches formatting requests according to the Lightweight Directory Access Protocol (See col. 6, lines 41-43). Using the features of Jiao in the system of Kepler, Parham and Bondarenko would have allowed the system to take advantage of mechanisms offered by LDAP, including the ability to determine the structure of information in a directory, and the ability to receive paged information delivery. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Jiao in the system of Kepler, Parham and Bondarenko.

55. Regarding claim 28, Kepler, in view of Parham and Bondarenko, teach the invention as described in claim 26. Kepler, in view of Parham and Bondarenko, do not teach the second request is formatted according to the Lightweight Directory Access Protocol (LDAP). However, Jiao teaches formatting requests according to the

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Lightweight Directory Access Protocol (See col. 6, lines 41-43). Using the features of Jiao in the system of Kepler, Parham and Bondarenko would have allowed the system to take advantage of mechanisms offered by LDAP, including the ability to determine the structure of information in a directory, and the ability to receive paged information delivery. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Jiao in the system of Kepler, Parham and Bondarenko.

56. Regarding claim 36, this claim recites a machine-readable medium with instructions for carrying out the method of claim 7, and is rejected for the same reasons.

57. Regarding claim 37, this claim is an exact duplicate of claim 36, and is rejected for the same reasons.

58. Regarding claim 50, this claim recites a machine-readable medium with instructions for carrying out the method of claim 21, and is rejected for the same reasons.

59. Regarding claim 51, this claim recites a machine-readable medium with instructions for carrying out the method of claim 22, and is rejected for the same reasons.

60. Regarding claim 52, this claim recites a machine-readable medium with instructions for carrying out the method of claim 23, and is rejected for the same reasons.

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61. Regarding claim 53, this claim recites a machine-readable medium with instructions for carrying out the method of claim 24, and is rejected for the same reasons.

62. Claims 25 & 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kepler, in view of Parham, Bondarenko and Jiao, as applied to claims 21 & 50 above, and further in view of U.S. Patent Application Publication No. 2003/0120502 to Robb, et al. (Robb), and U.S. Patent No. 6,006,331 to Chu, et al. (Chu).

63. Regarding claim 25, Kepler, in view of Parham, Bondarenko and Jiao, teach the invention as described in claim 21. Kepler, in view of Parham, Bondarenko and Jiao, do not teach the set of network location services include Session Initiation Protocol (SIP), and Internet Locator Service (ILS). However, Robb teaches the Session Initiation Protocol as a network location service (See par. 3, line 68), and Chu teaches the Internet Locator Service (ILS) as a network location service (See col. 5, lines 34-35). Using the features of Robb and Chu in the system of Kepler, in view of Parham, Bondarenko and Jiao, would have expanded the locating capabilities of the system, thereby allowing faster location of servers, computers and users, and possibly locating more servers, computers and users than otherwise possible. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Robb and Chu in the system of Kepler, in view of Parham, Bondarenko and Jiao.

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64. Regarding claim 54, this claim recites a machine-readable medium with instructions for carrying out the method of claim 25, and is rejected for the same reasons.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Seto whose telephone number is (571)270-7198. The examiner can normally be reached on Monday thru Thursday and alt. Fridays, 9:30 AM-7 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph E. Avellino can be reached on (571) 272-3905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Joseph E. Avellino/
Primary Examiner, Art Unit 2446